REMARKS/ARGUMENTS

Claims 1-19 and 21-66 are pending. Claim 20 has been cancelled. Claims 12 and 25 have been amended.

Claims 1-10, 12-31, 33-38, 41-60, and 62 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,523,027 to Underwood.

Claims 11, 32, 39, 40, and 63-66 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,523,027 to Underwood in view of Derwent 199741, JP-09198393, "Document searching apparatus in database", IPC: G06F017/30.

Claim 61 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,523,027 to Underwood in view of U.S. Patent 6,216,140 to Kramer.

Although box 10 was checked on the Office Action Summary Sheet of August 13, 2003, there was no indication as to whether the drawings have been accepted or objected to by the examiner.

The disclosure stands objected to as containing an informality Applicants have amended the specification as noted above to correct informalities. No new matter has been added.

Reconsideration of the Office Action of August 13, 2003 is respectfully requested in view of this response.

Amendments to Claims 12 and 25

Claim 12 has been amended to recite that the further service providers comprise code for performing a development service in a software development system. No new matter has been added by this amendment. The amendment finds support in at least FIG. 3, and the text descriptive of those figures on page 11, line 30 through page 13, line 25.

Claim 25 has been amended to recite that the further service providers perform development services. No new matter has been added by this amendment. The amendment finds support in at least FIG. 3, and the text descriptive of those figures on page 11, line 30 through page 13, line 25.

Claims 1-10, 12-19, 21-31, 33-38, 41-60, and 62

Claims 1-10, 12-19, 21-31, 33-38, 41-60, and 62 stand rejected under 35 U.S.C. §
102(e) as being anticipated by U.S. Patent 6,523,027 to Underwood.

Applicants respectfully disagree with, and traverse, the stated grounds for rejection.
As described below, the claims recite various features that are neither taught nor suggested by
the prior art. Applicants thus submit that all of the claims are novel and non-obvious over the
prior art of record.

Below, applicants discuss various claim features that define over the prior art of
record.

Claim 1

As per claim 1, the claim is directed to a system for developing software, comprising:
"a version store for storing a plurality of development documents", "a plurality of service
providers performing different development functions, and each having a mutually
compatible interface", and "a client having the same compatible interface, for receiving
commands from a user and routing them to various ones of the service providers for
execution upon the development documents from the version store."

The examiner has rejected claim 1 as being anticipated by Underwood. However,
applicants respectfully maintain that the elements from Underwood pointed out by the
examiner do not teach or suggest the claimed invention.

As for the claimed element of a "version store for storing a plurality of development
documents," the examiner directs our attention to the PVCS of Underwood, described in
column 252, lines 21-33, and in Figures 93A and 93B.

For the claimed element of a client, the examiner directs our attention to column 30,
lines 35-63 of Underwood. This section of Underwood discusses an activity, element 834.
However, there is no suggestion in Underwood that the activity, element 834, (1) receives
commands from a user, and (2) routes them to various service providers for execution on
documents from the version store.

An activity in Underwood support high-level processes that are not the responsibility
of any individual business components. Thus, an activity in Underwood can marshal

multiple web pages to implement a "logical unit of work" such as "Create Service Order". (See Underwood, column 30, lines 8-23). An activity in Underwood, as seen in Figure 8B and discussed in column 30, lines 35-63, is a part of a controller, which interacts with business logic with views, and with other controllers.

However, there are a number of distinctions between an activity in Underwood and a client according to the invention. First, the activity in Underwood does not route commands to various service providers for execution on development documents from the version store. Underwood describes a development architecture used for creating applications. (See Underwood, col. 187, line 6-14). This development architecture (described in Underwood at column 76, line 58 through column 119, line 13, column 142, line 65 through column 143, line 9, and column 187, line 5 through column 308, line 55) is specialized to develop certain applications which operate according to a specific framework. (See Underwood, col. 15, lines 14-29). The framework is described in Underwood at column 17, line 23 through column 76, line 54.

The version store, as shown in Figure 93B, is part of the development architecture described in Underwood. However, the activity in Underwood, as seen in Figure 8B, is part of the framework of the applications being developed in the development architecture. Thus, the activities in Underwood can not be seen as routing any commands for execution on development documents from the version store. While the examiner appears to direct applicants' attention to the first server, second server, router, and Wan of Underwood as version storage for development documents, Underwood does not teach or suggest that any of these is a version store for storing a plurality of development documents which receive commands via a client (or activity.) Thus, Underwood does not teach or suggest that the activity (in the developed application) routes commands for execution on development documents from the version store (in the development architecture.)

Additionally, claim 1 of the invention includes the element of "a plurality of service providers performing different development functions, and each having a mutually compatible interface". The client, according to claim 1, has *the same compatible interface*, and routes commands to various ones of the service providers for execution on development documents from the version store. However, the only teaching or suggestion in Underwood regarding the routing of commands by the activity (which the examiner has analogized to the

client) is that it routes commands to subactivities, such as subactivity 838 in Figure 8B (described in column 30, line 65 through column 31, line 10. But these subactivities 838 do not have *the same compatible interface*. No indication exists in Underwood that an interface of the activities and an interface of sub-activities is the same compatible interface.

The examiner refers applicants to the "user interface", "activities", "ASP" and "views" in Figure 47 as teaching the "plurality of service providers". However, there is no indication in Underwood that these have a mutually compatible interface. Additionally, there is no indication in Underwood that the activity (which the examiner has indicated teaches the "client" element of claim 1) routes commands to the user interface or ASP. Thus, as mentioned above, Underwood does not teach or suggest that the activity (analogized to the client in claim 1 of the application) has the same interface and routes commands to the user interface, other activities, ASP, or views.

The examiner also refers applicants to the presentation, Web & Application Server, Netscape communicator, Internet Explorer, and console Site server in Figs. 48, 51-53, 56-67, and 72B. In addition to the lack of any indication in Underwood that these have a mutually compatible interface, these also are not related to the activity as shown in Figure 47 or 8B or as described in Underwood.

Therefore, there is no suggestion or teaching in Underwood of a client which has the same compatible interface as a service provider to which it routes commands, as claimed in claim 1 of the invention.

The elements of claim 1 are not taught or suggested by Underwood. Thus, the §102 rejection of claim 1 should be withdrawn.

Claims 2-10

Because, as discussed above, the applicants maintain that the elements of claim 1 are neither taught nor suggested in Underwood, claims 2 through 10, which are dependent on claim 1, are similarly not taught or suggested in Underwood. In addition, specific features of these dependent claims are not found in Underwood, including the following:

Claim 2

While the examiner directs applicants' attention to the backup router and Altavista, none of these are taught or suggested in Underwood as replacing service providers or as

replacing the elements of Underwood (e.g. user interface, activities, ASP, views) which the examiner has analogized to the service providers in claim 1 of the application.

Additionally, none of these are taught or suggested in Underwood as replacing the activity which the examiner has analogized to the client of claim 1 of the application.

Therefore, Underwood does not teach or suggest the elements of claim 2.

Claim 4

While the examiner directs applicants' attention to the API and set of methods described in column 129, lines 15-27 and column 130, line 55 through column 132, line 14, it is not taught or suggested in Underwood that the access services or the browser are included in the activity (which the examiner has used to reject the "client" element of claim 1) or in any of the service providers used by the examiner to reject the "plurality of service providers" element of claim 1. This is also true of the other ostensible interfaces comprising APIs found by the examiner in Underwood – none are taught or suggested in Underwood to be part of the activity and service providers from Underwood that the examiner has used to reject claim 1.

Claim 5

The examiner finds that, in Underwood, the diversity of services to implement ReTA implicitly discloses that each service provider implements less than all of the methods in a set of methods, however the applicants argue that (1) no indication can be found in Underwood that the services implemented by ReTA each use a mutually compatible interface, and (2) contrary to the examiner's contention, there is no indication in Underwood, implicit or explicit, that if these service providers were using a mutually compatible interface, that each service provider would implement less than all of the methods in the interface.

Claim 6

The examiner shows that Underwood discloses the use of OLE DB. However, although Underwood does mention OLE DB, no where does Underwood teach or suggest that an interface used by the activity or a service provider implements an API including at least a subset of OLE DB.

Claim 7

The examiner maintains an object model exposing the same compatible interface is found in the source save view and the Rational Rose modeling tool. However, Underwood does not teach or suggest that either source save view or Rational Rose exposes the same

compatible interface as either the service providers or the activities (which have been

analogized by the Examiner to elements of claim 1).

Claim 8

The examiner shows that Underwood discloses the use of a command-line utility.

However, Underwood discloses this as part of exegen.exe, Underwood does not teach or

suggest what it does. Specifically, Underwood does not teach or suggest this command-line

utility as passing user commands to service providers through a compatible interface.

Claims 2-10

The elements of claims 2-10 are not taught or suggested by Underwood. Thus, the

§102 rejection of claims 2-10 should be withdrawn.

Claim 12-19 and 21-24

As per claim 12, the claim as amended, is directed to a development service provider

for a software development system, comprising code for performing a development service in

a software development system, and an interface for communicating with a set of further

development service providers.

It is not clear what the examiner is analogizing to the service provider claimed in

claim 12. The examiner refers to figures which show a software development service.

However, there is no indication in Underwood that a number of service providers

communicate with each other and with a client through one interface, nor does Underwood

show a number of service providers all providing software development services.

As per claims 13-19 and 21-24, because, as discussed above, the applicants maintain

that the elements of claim 12 are neither taught nor suggested in Underwood, claims 13-19

and 21-24, which are dependent on claim 12, are similarly not taught or suggested in

Underwood. In addition, specific features of these dependent claims are not found in

Underwood, including the following:

As per claims 15, 16, and 18, applicant again maintains that Underwood to the extent

that Underwood discloses a framework and a development system to develop applications

according to the framework, it discloses these only separately. Even if the framework can be

seen as including a query processing service (columns 123, 124, and 129) or enlistment

management (columns 35-62) or a compatible interface for more than one service provider

(Figure 15B, Figure 17B, Figure 19-22), as the examiner maintains, the framework or elements of the framework is not taught or suggested in Underwood as being combined with elements of the development system.

As per claim 17, no interface to a private store holding copies of development documents is taught or suggested in Underwood. The examiner has directed applicants' attention to a number of locations in Underwood. However, column 37 does not refer to the development system, but rather to the framework. Figures 64, 111 and 93A do not show an interface, and column 164, lines 16-18 also does not teach or suggest such an interface.

As per claim 21, refer to the remarks for claim 4.

As per claim 22, refer to remarks for claim 5.

As per claim 24, refer to remarks for claim 6.

Claims 12-19 and 21-24

The elements of claims 12-19 and 21-24 are not taught or suggested by Underwood. Thus, the §102 rejection of claims 12-19 and 21-24 should be withdrawn.

Claim 25-31, 33

As per claim 25, the claim, as amended, is directed to a client for a software development system, comprising means for receiving commands from a user for executing development operations, and an interface for communicating with compatible interfaces of a plurality of service providers, where said service providers provide development services.

Again, there is no indication in Underwood that a number of service providers provide development services and communicate with a client through one interface.

As per claims 28 and 29, please see applicants' comments regarding claim 34, below.

As per claims 26-31 and 33, because, as discussed above, the applicants maintain that the elements of claim 25 are neither taught nor suggested in Underwood, claims 25-31 and 33, which are dependent on claim 25, are similarly not taught or suggested in Underwood.

The elements of claims 25 through 31 and 33 are not taught or suggested by Underwood. Thus, the §102 rejection of claims 35-31 and 33 should be withdrawn.

Claims 34-38

As per claim 34, the claim is directed to a merge subsystem for a software developments system, comprising: a merge engine for merging a plurality of development documents into a merge document, a plurality of merge preprocessors for modifying the merge documents and passing them to the merge engine, and a merge broker for receiving a merge command and for selecting one of the preprocessors in response to the command.

The examiner has particularly pointed out the "merge" functionality in the PVCS VM Server as described in Underwood at column 90, line 59 through column 91, line 14. Additionally, the examiner has pointed out the "menu item privilege" "NoActionsMerge" in the table bridging columns 258-259. However, this "NoActionsMerge" is not further explained, and the applicants respectfully submit that this "NoActionsMerge" can not be said to teach or suggest a merge engine.

The examiner directs applicants to "a selection of hosts and servers and security services", which is said to teach a selection service for processors, "some of which, implicitly, can be merge subsystem processors." The examiner finds that, therefore, Underwood teaches the claimed merge broker. Applicants respectfully disagree. The presence of hosts and servers and security services does not imply the merge functionality of those hosts and servers and security services. There is no indication anywhere in Underwood that versioning functionality, such as merge functionality, would be split among the hosts, servers, and security services which Underwood discloses. Thus, there is no teaching or suggestion of a merge broker for such a split. Additionally, there is no teaching that any "merge command" exists in Underwood or that any is transmitted to any of the "selection of hosts and servers and security services" in any way, including by a merge broker or analogous element.

Additionally, the examiner has stated that a "merge engine" is taught by Underwood in column 90, line 59 through column 91, line 14, and column 258, lines 50-66. However, at most, Underwood shows that merge functionality exists, but not how it is accomplished. Column 258, lines 50-66 include a listing of user privileges for the PVCS system, but no indication of how a merge might be accomplished. No "merge engine" is taught by Underwood.

As per claims 35-38, because, as discussed above, the applicants maintain that the elements of claim 34 are neither taught nor suggested in Underwood, claims 35-38, which are dependent on claim 34, are similarly not taught or suggested in Underwood.

As per claim 35, the feature of the specification of development documents is not shown in Figures 104-118 of Underwood.

As per claim 36, there are many ways in which processors could be selected from a group of processors to carry out a command, the selection of a preprocessor via a parameter in a command is not inherent in the selection of a preprocessor "in response to a command."

As per claims 37 and 38, these claims are not dependent on claims 29 or 30, therefore it is not clear what is meant by the examiner's statement that these claim limitations are inherently disclosed via claim 29 and 30.

The elements of claims 34 through 38 are not taught or suggested by Underwood. Thus, the §102 rejection of claims 34 through 38 should be withdrawn.

Claims 41-49 and 50

As per claim 41, the claim is directed to a method for developing software comprising sending commands from a client through a versioning interface, receiving the commands in a plurality of service providers all having an interface compatible with the versioning interface, executing the commands in the service providers, and retrieving and storing a plurality of documents in a version store.

As discussed above, in remarks regarding claims 1, 12, and 25, Underwood does not teach or suggest a client, a plurality of service providers, or a compatible interface among the client and the service providers. In this rejection, the examiner has referred to 43 figures (Figs. 75 through 86, 93A through 118, and 132A. Respectfully, these figures and the text describing them do not teach the elements of claim 43.

As per claims 42-49, because, as discussed above, the applicants maintain that the elements of claim 41 are neither taught nor suggested in Underwood, claims 42-49, which are dependent on claim 41, are similarly not taught or suggested in Underwood.

As per claim 43, no interfaces are shown or described in Fig. 42 and Fig. 65 or their accompanying text.

As per claims 44-46, refer to the remarks concerning claims 4-6.

As per claim 50, because the examiner has incorporated the rejection from claim 41, and the applicants maintain that the elements of claim 41 are neither taught nor suggested in Underwood, applicants maintain that the elements of claim 50 are neither taught nor suggested in Underwood.

The elements of claims 42 through 50 are not taught or suggested by Underwood. Thus, the §102 rejection of claims 42 through 50 should be withdrawn.

Claims 51-55 and 56

As per claim 51, the claim is directed to a method for develop software comprising receiving a user command from a client having a versioning interface in one of a plurality of service providers each having an interface compatible with the versioning interface.

Similarly to claim 42 above, applicants refer to their remarks in regard to claims 1, 12, and 25. Underwood does not teach or suggest a client, a plurality of service providers, or a compatible interface among the client and the service providers, thus this claim element is neither taught nor suggested in Underwood.

As per claims 52-55, because, as discussed above, the applicants maintain that the elements of claim 51 are neither taught nor suggested in Underwood, claims 52-55, which are dependent on claim 51, are similarly not taught or suggested in Underwood.

As per claim 55, applicants refer to remarks regarding claim 17.

As per claim 56, because the examiner has incorporated the rejection from claim 51, and the applicants maintain that the elements of claim 51 are neither taught nor suggested in Underwood, applicants maintain that the elements of claim 56 are neither taught nor suggested in Underwood.

The elements of claims 51 through 56 are not taught or suggested by Underwood. Thus, the §102 rejection of claims 51 through 56 should be withdrawn.

Claims 57-60 and 62

As per claim 57, the claim is directed to a method for developing software in a programmed digital computer. Applicants refer to their arguments above, with respect to claim 34. No merge engine or merge preprocessors are taught or suggested in Underwood,

these are inherent in the steps in claim 57 of "selecting one of a plurality of merge preprocessors" and "merging the development documents in a merge engine".

As per claims 58-60, because, as discussed above, the applicants maintain that the elements of claim 57 are neither taught nor suggested in Underwood, claims 58-60, which are dependent on claim 57, are similarly not taught or suggested in Underwood.

As per claim 62, because the examiner has incorporated the rejection from claim 57, and the applicants maintain that the elements of claim 57 are neither taught nor suggested in Underwood, applicants maintain that the elements of claim 62 are neither taught nor suggested in Underwood.

The elements of claims 57 through 60 and 62 are not taught or suggested by Underwood. Thus, the §102 rejection of claims 57-60 and 62 should be withdrawn.

Claims 11, 32, 39, 40, and 63-66

Claims 11, 32, 39, 40, and 63-66 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,523,027 to Underwood in view of Derwent 199741, JP-09198393, "Document searching apparatus in database", IPC: G06F017/30 ("JP-09198393").

Applicants respectfully disagree with, and traverse, the stated grounds for rejection.

Claims 11 and 32 are dependent from claims rejected as being anticipated by Underwood. As argued above, these claims incorporate various features of the independent claims they depend from that are neither taught nor suggested by the prior art. Additionally, applicants refer to their comments below.

The features of claims 39, 40, and 63-66 are not taught or suggested in either Underwood or JP-09198393.

Applicants thus submit that all of the claims are novel and non-obvious over the prior art of record.

Claims 39-40

The claim limitations in claim 39 and its dependent claim 40 of "a plurality of keyword expanders for expanding keywords in a development document" and "a keyword broker for receiving a command to expand the development document and for selecting one of the providers in response to the command" are not taught or suggested in the prior art.

Only the title and basic abstract of JP-09198393 are in English. The examiner does not argue that JP-09198393 teaches or suggests a plurality of keyword expanders or a keyword broker which receives a command to expand the development document. There is no teaching or suggestion in JP-09198393 of a plurality of keyword expanders. There is also no teaching in JP-09198393 of a keyword broker which selects one of the plurality of keyword expanders.

While the examiner states that it would have been obvious to add a plurality of keyword expanders to the development system described in Underwood, and that then the addition of a broker would have been obvious, applicants respectfully disagree. There is no teaching of suggestion of such a plurality or broker in JP-09198393 or elsewhere in the cited prior art, and there is no motivation to alter any of the prior art systems in the suggested way found in any of the prior art.

Claims 63-65 and 66

As per claims 63 and dependent claims 64 and 65, applicants refer to the arguments above, regarding claims 39-40. As per claim 66, because the examiner has incorporated the rejection from claim 63, and the applicants maintain that the elements of claim 63 are neither taught nor suggested in Underwood or JP-09198393, applicants maintain that the elements of claim 66 are neither taught nor suggested in Underwood or JP-09198393.

As per claim 64, there is no teaching or suggestion in Underwood or JP-09198393 that keyword expansion is performed by a plurality of keyword expanders, or that a generic keyword expander could be used for a given keyword.

As per claim 65, there is no teaching or suggestion in Underwood or JP-09198393 of a keyword-domain parameter. Additionally, there is no motivation to combine keyword expansion in JP-09198393 with any domain taught in Underwood. The domain referred to in Underwood is not related to the versioning system of the development system of Underwood.

Claims 61

Claim 61 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,523,027 to Underwood in view of U.S. Patent 6,216,140 to Kramer.

Applicants respectfully disagree with, and traverse, the stated grounds for rejection.

Claims 61 is dependent from claim 60, which is dependent from claim 57. Claim 60 and claim 57 have been rejected as being anticipated by Underwood. As argued above, these claims incorporate various features of the independent claims they depend from that are neither taught nor suggested by the prior art.

Applicants thus submit that all of the claims 1-19 and 21-66 are novel and non-obvious over the prior art of record. For all of the foregoing reasons, applicants respectfully submit that this case is now in condition for allowance, and an early notice of allowance is earnestly solicited.

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